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WHAT IS CLAIMED IS:

1        1.        A display, comprising:

2                a display lightguide, on which a shape of a display character is  
3        formed in three dimensions;

4                a light source, emitting a light toward the display lightguide; and

5                a light collection portion, provided between the light source and the  
6        display lightguide, and having a light reflection face formed like a parabolic  
7        face which employs a straight line perpendicular to a light receiving face of the  
8        display lightguide as an axis thereof.

1        2.        The display as set forth in claim 1, further comprising a light diffusion  
2        member, provided between the display lightguide and the light collection  
3        portion.

1        3.        The display as set forth in claim 1, further comprising a blocking  
2        member, placed to a front side of the display lightguide, and having a hole  
3        portion which is formed so as to correspond to the shape of the display  
4        character.

1        4.        The display as set forth in claim 1, wherein the light collection portion  
2        includes a light collection lightguide; and  
3                wherein an outer side face of the light collection lightguide is formed  
4        like the parabolic face as the light reflection face.

1        5.        The display as set forth in claim 1, wherein the light collection portion  
2        having a hole or a groove provided therein; and  
3                wherein an inner side face of the hole or the groove formed in the  
4        light collection portion is formed like the parabolic face as the light reflection  
5        face.

1        6.        The display as set forth in claim 1, wherein a display segment is  
2        formed on the display lightguide as the display character, and  
3                wherein the light reflection face is formed by moving a parabola,  
4        which is included in a section of the parabolic face, in a direction perpendicular  
5        to a face formed by the parabola and the axis without changing a shape of the  
6        parabola.

1        7.        The display as set forth in claim 1, wherein a display segment is  
2        formed on the display lightguide as the display character, and  
3                wherein the light reflection face is formed by moving a parabola,  
4        which is included in a section of the parabolic face, in a direction perpendicular  
5        to a face formed by the parabola and the axis while continuously changing a  
6        gradient of the parabola, so that a shape drawn by each of ends of the  
7        parabola during the parabola is moved almost coincides with a shape of each  
8        of longer-side ends of the display segment.

1        8.        The display as set forth in claim 1, wherein a display segment is  
2        formed on the display lightguide as the display character, and  
3                wherein the light reflection face is formed by moving a parabola,

4        which is included in a section of the parabolic face, in a direction perpendicular  
5        to a face formed by the parabola and the axis while intermittently changing a  
6        gradient of the parabola, so that a shape drawn by each of ends of the  
7        parabola during the parabola is moved almost coincides with a shape of each  
8        of longer-side ends of the segment.

1        9.        The display as set forth in claim 1, further comprising a substrate on  
2        which the light source is provided,  
3        wherein the light collection portion is fixed on the substrate.

1        10.        The display as set forth in claim 1, wherein a plurality of the light  
2        sources is formed; and

3        wherein a plurality of the display characters are respectively formed  
4        so as to correspond to the light sources;

5        wherein the light collection portion has a light blocking member which  
6        has a plurality of through holes penetrating through from a rear face thereof to  
7        a front face thereof, the through holes corresponding to the display characters  
8        respectively; and

9        wherein the light reflection face is provided in each of the through  
10       holes.

1        11.        A light collection member for collecting an irradiated light from a light  
2        source, and irradiating the corrected light to a display face so that a segment  
3        portion of the display face is illuminated, comprising:

4        a light reflection face, shaped like a parabolic face having a section

5        which includes a parabola,  
6                wherein the parabolic face of the light reflection face is formed by  
7        moving the parabola in a direction perpendicular to a face formed by the  
8        parabola and an axis thereof without changing a shape of the parabola.

1        12.        A light collection member for collecting an irradiated light from a light  
2        source, and irradiating the corrected light to a display face so that a segment  
3        portion of the display face is illuminated, comprising:  
4                a light reflection face, shaped like a parabolic face having a section  
5        which includes a parabola,  
6                wherein the parabolic face of the light reflection face is formed by  
7        moving the parabola in a direction perpendicular to a face formed by the  
8        parabola and an axis thereof while continuously changing a gradient of the  
9        parabola, so that a shape drawn by each of ends of the parabola during the  
10       parabola is moved almost coincides with a shape of each of longer-side ends  
11       of the segment portion.

1        13.        A light collection member for collecting an irradiated light from a light  
2        source, and irradiating the corrected light to a display face so that a segment  
3        portion of the display face is illuminated, comprising:  
4                a light reflection face, shaped like a parabolic face having a section  
5        which includes a parabola,  
6                wherein the parabolic face of the light reflection face is formed by  
7        moving the parabola in a direction perpendicular to a face formed by the  
8        parabola and an axis thereof while intermittently changing a gradient of the

9 parabola, so that a shape drawn by each of ends of the parabola during the  
10 parabola is moved almost coincides with a shape of each of longer-side ends  
11 of the segment portion.

1 14. A light diffusion member for diffusing a light to be irradiated into a  
2 display member, the display member having a plurality of display characters  
3 which are illuminated by the light, comprising:

4 a plurality of light diffusion portions, disposed so as to correspond to  
5 the display characters; and

6 a connection portion, connecting the diffusion portions to one another.

1 15. The light diffusion member as set forth in claim 14, wherein when at  
2 least four display segments are placed as the display characters on four sides  
3 surrounding a space, at least four diffusion portions is placed on four sides  
4 surrounding a space so as to respectively correspond to the four display  
5 segments; and

6 wherein the connection portion is formed so as to extend from a  
7 nearly center of the space surrounded by the diffusion portions to each of the  
8 diffusion portions.

1 16. The light diffusion member as set forth in claim 15, wherein the  
2 connection portion has a plurality of extending parts respectively extending  
3 from the nearly center to the diffusion portions; and

4 wherein the extending parts have differently curves respectively.  
5

1     17.     The light diffusion member as set forth in claim 14, wherein the  
2     display member has a plurality of display lightguides, each display lightguide  
3     having the display character formed in three dimensions; and  
4             wherein the light diffusion member is integrally formed with the  
5     display lightguides.

1     18.     The light diffusion member as set forth in claim 17, wherein the light  
2     diffusion member is integrally formed with the display lightguides by injecting a  
3     forming agent for forming the display lightguides into a mold for the display  
4     lightguides, during a state in which the light diffusion member is inserted into  
5     the mold.

1     19.     The light diffusion member as set forth in claim 17, wherein the light  
2     diffusion member is integrally formed with the display lightguides by two-color  
3     forming using a forming agent for forming the light diffusion member and a  
4     forming agent for forming the display lightguides.

1     20.     A light diffusion member for diffusing a light to be irradiated into a  
2     display member, the display member having a plurality of display characters  
3     which are illuminated by the light, comprising:  
4             a light blocking portion provided at a position corresponding to a  
5     boundary portion between adjacent display characters.

1     21.     The light diffusion member as set forth in claim 20, wherein the light  
2     blocking portion is either a concave portion or a convex portion formed on the

3 light diffusion member.

1 22. The light diffusion member as set forth in claim 20, wherein the  
2 display member has a plurality of display lightguides, each display lightguide  
3 having the display character formed in three dimensions; and  
4 wherein the light diffusion member is integrally formed with the  
5 display lightguides.

1 23. The light diffusion member as set forth in claim 22, wherein the light  
2 diffusion member is integrally formed with the display lightguides by injecting a  
3 forming agent for forming the display lightguides into a mold for the display  
4 lightguides, during a state in which the light diffusion member is inserted into  
5 the mold.

1 24. The light diffusion member as set forth in claim 22, wherein the light  
2 diffusion member is integrally formed with the display lightguides by two-color  
3 forming using a forming agent for forming the light diffusion member and a  
4 forming agent for forming the display lightguides.

1 25. A display comprising:  
2 a light source, irradiating a light;  
3 a light diffusion member, having a plurality of diffusion portions which  
4 diffuse the light from the light source, and having a curved connection portion  
5 which connects the diffusion portions; and  
6 a display portion, having a plurality of display characters to be



7 illuminated by the diffused light,  
8 wherein the diffusion portions are placed so as to correspond to the  
9 display characters respectively.

1 26. A display comprising:  
2 a light source, irradiating a light;  
3 a light diffusion member, diffusing the light from the light source; and  
4 a display portion, having a plurality of display characters to be  
5 illuminated by the diffused light,  
6 wherein a light blocking portion is formed on the light diffusion  
7 member so as to correspond to a boundary portion between adjacent display  
8 characters.

1 27. The display as set forth in claim 26, wherein the light blocking portion  
2 is either a concave portion or a convex portion formed on the light diffusion  
3 member.

1 28. A display member, comprising:  
2 a display lightguide, provided with a convex portion having a top face  
3 shaped into a display character,  
4 wherein a light diffusion processing is performed on at least one of  
5 the top face and a side face of the convex portion.

1 29. A display member, comprising:  
2 a display lightguide, provided with a convex portion having a top face

3 shaped into a display character,  
4 wherein a side face of the convex portion is tapered off toward the top  
5 face of the convex portion.

1 30. A display member, comprising:  
2 a display lightguide, provided with a convex portion having a top face  
3 shaped into a display character,  
4 wherein a light diffusion processing is performed on a bottom face  
5 opposed to the top face of the convex portion in the display lightguide.

1 31. A display member, comprising:  
2 a display lightguide, provided with a convex portion having a top face  
3 shaped into a display character in three dimensions,  
4 wherein the convex portion is provided in a concave portion formed  
5 on the display member.

1 32. A display member, comprising:  
2 a plurality of display lightguides, respectively provided with convex  
3 portions, each convex portion having a top face shaped into a display  
4 character in three dimensions; and  
5 a dark member, connecting the display lightguides to one another.

1 33. A display member, comprising:  
2 a display lightguide, provided with a convex portion having a top face  
3 shaped into a display character in three dimensions,

4                    wherein at least a part of the convex portion is comprised of a colored  
5                    part.

1            34.        A display comprising:  
2                    a display member, including a display lightguide which is provided  
3                    with a convex portion having a top face shaped into a display character; and  
4                    a light source, emitting a light to the display member,  
5                    wherein a light diffusion processing is performed on at least one of  
6                    the top face and a side face of the convex portion.